DEBATE 11: CLIMATE ASSESSMENT
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The Emergence of Climate Assessment as a Customary Law Obligation

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In the last half-century, virtually every state has adopted laws and policies on the protection of the environment, including procedural safeguards to ensure that decisionmakers are well informed about the foreseeable consequences of their decisions on the environment. Terminology varies among states; here, I will use 'environmental assessment' as an umbrella concept which includes project-based 'environmental impact assessment' (EIA) as well as 'strategic environmental assessment' (SEA) applicable to policies, plans, and programmes. The scope and content of environmental assessments vary among states, but these procedures normally include both a scientific assessment of the likely costs and benefits of the activity and some form of public participation before a political decision is made on whether or not to approve it. Almost every state now has a mandatory EIA procedure, and many also have a mandatory SEA procedure. Environmental assessments have increasingly been recognized as an international law obligation,[1] in particular, but not only,[2] when an activity is likely to affect the environment beyond the state's own jurisdiction. In 2010, the International Court of Justice identified 'a requirement under general international law to undertake an [EIA] where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource.'[3]

Many states have now started to use environmental assessment (EIA and SEA) procedures as a tool for climate change mitigation. These states require that the scientific assessment of certain projects include an assessment of their GHG emissions and consideration of possible ways to reduce those emissions. Like any other environmental assessment, this scientific study forms the basis of public consultations. Informed political decisionmakers may decide against approving the project due to its GHG emissions (and other environmental concerns), or, more frequently, to authorize it with one or more conditions aimed at reducing the project's GHG emissions. The procedure is particularly important for infrastructure projects which may lock an economy in a carbon-intensive development process if decisions leading up to them are not properly informed and weighed.

This chapter highlights the rise of what I will call, for short, 'climate assessment', in state practice and in international law.[4] On the basis of an increasingly consistent practice of states and its gradual acceptance as law, I identify an emerging rule of customary international law requiring states to conduct climate assessment.

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[1] See generally Neil Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (CUP 2008).
[2] See *South China Sea (Philippines v China)* (Award of 12 July 2016) 170 ILR 1, 564 [940].
[3] See *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 14, 72-73 [204]. See also ITLOS, *Responsibilities and Obligations of States with respect to Activities in the Area* (Advisory Opinion) [2011] ITLOS Reports 10, 39 [148]; *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica)* (Judgment) [2015] ICJ Rep 665, 705 [101].
[4] This chapter builds in part on Benoit Mayer, 'Climate Assessment as an Emerging Obligation under Customary International Law' (2019) 68 ICLQ 271.

This chapter is to be read together with the one that follows, where Alexander Zahar attempts to refute my argument. His counterargument, as sophisticated as it may be, misses the point. Zahar asserts that climate assessment cannot be a legal obligation because—in his assessment—climate assessment is 'illogical' or 'senseless',[5] hence ineffective. Deciding which policy tools are effective is part of the law-making process—and evidence shows that states (the lawmakers) have found that climate assessment is effective when they accepted it as law. Arguments about effectiveness, however, are not part of the process of interpreting the law. No judge has ever set aside a rule of international law on the ground that the rule is ineffective—or, as Zahar puts it, 'senseless'. Even if Zahar were right that climate assessment is useless, it would remain law.

The first section develops the doctrinal argument at the core of this chapter: it shows evidence of a general state practice and a growing acceptance of it as law, which suggest that climate assessment either is, or is in the process of emerging as, an obligation under customary international law. In the second section, I cannot help but follow Zahar into the policy field, showing why climate assessment is certainly not entirely useless.

An Emerging Obligation under Customary International Law

Rules of customary international law can be identified by ascertaining the existence of a general practice of states that is accepted as law.[6] In this section, I show that there is a general practice of states, as well as elements suggesting a growing acceptance as law, in relation to the conduct of climate assessment.

General State Practice

Many states have implemented climate assessment procedures in recent years. In some countries, the evolution was spurred by court decisions interpreting pre-existing EIA or SEA laws as requiring a climate assessment. Thus, a US court of appeal interpreted the 1969 National Environmental Protection Act (NEPA, the first national EIA legislation) as requiring the assessment of the consequences of projects and policies on greenhouse gas emissions;[7] similar developments took place in (among other places) the United Kingdom,[8] South Africa,[9] and Australia.[10] In the European Union[11] and Canada,[12] lawmakers intervened to

[5] See Alexander Zahar, 'Environmental Impact Assessment for Greenhouse Gas Emissions Is Pie in the Sky' in Benoit Mayer and Alexander Zahar (eds), *Debating Climate Law* (CUP 2021) 227.
[6] ILC, Text of the draft conclusions on identification of customary international law, in Report of the ILC on its 70th Session, UN Doc A/73/10 (2018) 124 (conclusion 2).
[7] See, eg, *Border Power Plant Working Group v Department of Energy*, 260 F Supp 2d 997 (SD Cal 2003); *Mid States Coalition for Progress v Surface Transportation Board*, 345 F 3d 520 (8th Cir 2003); *Center for Biological Diversity v National Highway Traffic Safety Administration*, 538 F3d 1172 (9th Cir 2008).
[8] See, eg, *Barbone and Ross (on behalf of Stop Stansted Expansion) v Secretary of State for Transport* [2009] EWHC 463; *R (on the application of Griffin) v Newham London Borough Council* [2011] EWHC 53.
[9] See *Earthlife Africa Johannesburg v Minister of Environmental Affairs* (case 65662/2016) [2017] ZAGPPHC 58, [2017] 2 All SA 519 (GP).
[10] *Gloucester Resources Ltd v Minister for Planning* [2019] NSWLEC 7, (2019) 234 LGERA 257; *Gray v Minister for Planning and Others* [2006] NSWLEC 720; *Australian Conservation Foundation v Latrobe City Council* (2004) 140 LGERA 100.
[11] Parliament and Council Directive 2014/52, 2014 OJ L124/1, Annex IV, para 5(c).
[12] Impact Assessment Act 2019 (Canada), s22(1)(i).

extend the scope of environmental assessment procedures to greenhouse gas emissions. Enforcement agencies in the United States,[13] the European Union,[14] and China[15] adopted guidance documents interpreting mandatory environmental assessment procedures as requiring climate assessment. Inasmuch as international organizations may contribute to the formation or expression of state practice,[16] it may also be noted that multilateral development banks and other development institutions have included consideration for climate change mitigation in the EIA procedures they implement before approving a project,[17] in recognition of what the World Bank characterizes as 'good industrial practice'.[18]

Zahar will highlight that *not every state* has a mandatory climate assessment regime. The main exception is India, where a case is pending before the National Green Tribunal to determine whether the state must extend its EIA procedure as a tool for climate change mitigation.[19] New Zealand, Kazakhstan, and some states in Australia have at times resisted the trend, in two of these instances because of a confusion regarding the compatibility of climate assessment with market-based mechanisms. (The European Union's practice is testament that the two are not incompatible, but rather complementary.) In any case, none of these exceptions affects my argument. The 'general' state practice that is necessary to identify a rule of customary international law does not need to be *uniform*; it only needs to be 'sufficiently widespread and representative, as well as consistent';[20] and it is 'sufficient that

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[13] CEQ, 'Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews', (2016) 81 Fed Reg 51866. This document was withdrawn by Exec Order No 13783, 'Promoting Energy Independence and Economic Growth' (2017) s3(c); but see CEQ, 'Withdrawal of Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews', (2017) 82 Fed Reg 16576-77, confirming that 'the withdrawal of the guidance does not change any law, regulation, or other legally binding requirement.' Thus, US Courts have continued to refer to the Final Guidance. See, eg, *Western Organization of Resource Councils v Zinke*, 892 F3d 1234 (DC Cir 2018); *WildEarth Guardians v Zinke*, 2019 WL 2404860 (D Montana 2019).

[14] EU Commission, *Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment* (2013) <ec.europa.eu/environment/EIA/pdf/EIA%20Guidance.pdf>; and *Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment* (2013) <ec.europa.eu/environment/EIA/pdf/SEA%20Guidance.pdf>.

[15] Ministry of Environmental Protection (China), 建设项目环境影响技术评估导 (Guideline for technical review of environment impact assessment), Doc HJ616-2011 (2011) [6.3.2.8]; and 规划环境影响评价技术导则 ： 总纲 (Technical Guidelines for Strategic Environmental Assessment: General principles), Doc HJ 130-2014 (2014) A6.

[16] ILC, Identification of Customary International Law' (n 6) 130 (conclusion 4 (2)).

[17] World Bank, 'Environmental and Social Framework Setting Environmental and Social Standards for Investment Project Financing' (2016) 61 [16]; Asian Development Bank, Safeguard Policy Statement (2009) 16 [2]; Asian infrastructure Investment Bank, 'Environmental and Social Framework' (2016) 28; UN Development Programme, 'Social and Environmental Standards' (2014) 20 [6].

[18] World Bank, 'Review and Update of the World Bank's Safeguard Policies' (4, 2016) 21 [59]. See generally 'The Equator Principles: A Financial Industry Benchmark for Determining, Assessing and Managing Environmental and Social Risks in Projects' (June 2013) <equator-principles.com/wp-content/uploads/2017/03/equator_principles_III.pdf>.

[19] *Pandey v India*, petition filed in 2017, reported in Sabin Centre for Climate Change Law, Climate Change Litigation databases, <climatecasechart.com/non-us-case/pandey-v-india/>.

[20] ILC, Identification of Customary International Law' (n 6) 135 (conclusion 8(1)) (emphasis added).

the conduct of States should, in general, be consistent' with the rule.[21] Zahar does not appear to contest that state practice with regard to climate assessment is 'widespread', 'representative', and 'consistent', and, thus, that it is 'general', even if, as he notes, 'several judges'[22] in New Zealand and Queensland, Australia[23] have had some reservations. The opposition of one-and-a-half state does not deprive a practice from its 'general' character.

*Acceptance as Law (*Opinio Juris*)*

Acceptance as law is what distinguishes custom from mere usage or habit.[24] As interpreted by the ILC, this requirement is that 'the practice in question must be undertaken with a sense of legal right or obligation'.[25] It is notoriously difficult to establish this subjective element, if only because states are composed of individuals with different beliefs and motivations.[26] International courts and tribunals have held that states have accepted as law an obligation to carry out an environmental assessment at least in a transboundary context.[27] The question, here, is whether states have accepted a similar obligation in the context of a global environmental harm, in particular climate change.

Treaty practice[28] provides some evidence that states recognize the relevance of climate assessment as a tool for climate change mitigation. The UNFCCC, for instance, commands its parties to 'Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions.'[29] The parties to the Espoo Convention on Environmental Impact Assessment in a Transboundary Context adopted a 'Guidance' document recognizing that 'activities with linkages to climate change' are among those that can have 'long-range transboundary impacts', which are within the scope of the Convention.[30] In 2017, the joint meeting of the parties to the Espoo Convention and to its Kiev Protocol on Strategic Environmental Assessment recognized SEA as 'a key tool for the development of national climate change action and planning, and for the incorporation of

[21] *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States of America)* (Judgment) [1986] ICJ Rep 132, 98 [186].
[22] Zahar (n 5) 228.
[23] ibid 230 (footnote 14). Zahar also cites two decisions of Australia's Federal Court dated 2006 and 2007 (ibid 228 (footnote **Error! Bookmark not defined.**)). Few cases have been brought to the Federal Court in the last decade, apparently because EIA processes have, in practice, included consideration of GHG emissions. The Court has however found opportunities to indicate its understanding that GHG emissions should be considered as part of the mandatory federal EIA process. See in particular *Australian Conservation Foundation Incorporated v Minister for the Environment and Energy*, [2017] FCAFC 134 [51, 61].
[24] ILC, Identification of Customary International Law' (n 6) 138 (conclusion 9(2)).
[25] ibid (conclusion (1)).
[26] ibid 143-150 (conclusion 11-14).
[27] See *Pulp Mills* (n 4) 72-73 [204]; *Responsibilities in the Area* (n 4) 49-52 [141-150]; *Certain Activities* (n 4) 705 [101].
[28] Treaty provisions can evidence acceptance as law in limited circumstances. See ILC, Identification of Customary International Law' (n 6) 140, 143 (conclusions 10(2), 11).
[29] UN Framework Convention on Climate Change (adopted 9 May 1992, EIF 21 March 1994) 1771 UNTS 107 ibid art 4.1(f). See also UNGA Resolution 70/1 (2015), UN Doc A/RES/70/1, 23 (goal 13.2).
[30] UNECE, 'Guidance on the Practical Application of the Espoo Convention', UN Doc ECE/MP.EIA/8 (2006) [26].

specific climate change mitigation and adaptation measures into regional development and sectoral plans, programmes and policies'.[31]

Rather than treaties, however, it is the very conduct of states which provides the strongest evidence of a growing acceptance of climate assessment as an international customary law obligation.[32] A distinction needs to be drawn between conduct adopted by a state in pursuance of its own interests and conduct adopted in pursuance of what a state views as its duty.[33] States have little immediate interest in conducting climate assessment, as the diffuse, cumulative effect of GHG emissions on the global climate system would mostly impact areas beyond their territory. The adoption of climate assessment procedures by various countries and international organizations cannot be explained by courtesy, comity, political expediency, or convenience.[34] Climate assessment may sometimes be used as a tool for the state to comply with its commitments on climate change mitigation, but states do not generally distinguish between emissions that fall within the geographical[35] and temporal[36] scope of their commitments and other emissions, and states tend to carry out climate assessments even when they have no quantified commitment.[37] In most cases, a state's climate assessment procedure cannot be explained in any other way than as an attempt by the state to comply with what it recognizes as a legal obligation.

Climate Assessment as an Effective Tool

I now turn to Zahar's claim, in the following chapter, that climate assessment is 'senseless'.[38] It bears rehearsing that this claim cannot achieve what Zahar wants to do with it: a legal rule is a legal rule even if it is entirely useless.

Nevertheless, the argument about the alleged senselessness of climate assessment is interesting on its own because it reflects Zahar's sceptical approach to climate law and policy—a scepticism that goes far beyond the question of climate assessment. Zahar's intuition has long been that climate change is *so* different from anything ever seen before that extant rules and principles must be irrelevant[39] while any pre-existing policy tools will inevitably prove useless—climate law, Zahar thinks, must start from a clean slate. By the time Zahar reinvents the wheel, however, it may be too late to get it rolling. Without denying climate change's unique characteristics, I believe that existing rules, principles, and policy

[31] 'Minsk Declaration' (2017) [9], in UNECE, 'Decisions and the Declaration adopted jointly by the Meetings of the Parties to the Convention and the Protocol', UN Doc ECE/MP.EIA/23.Add.1–ECE/MP.EIA/SEA/7.Add.1.
[32] See *Military and Paramilitary Activities* (n 21) 107 [204] ('a practice illustrative of belief'). On the relation between treaties and the formation of customs, see n 25.
[33] See *Military and Paramilitary Activities* (n 21) 209 [208], noting that the conduct of the United States is 'justified ... on the political level.'
[34] ILC, Identification of Customary International Law' (n 6) 139 (commentary to conclusion 9 [3]).
[35] See, eg, *Gray* (n 9).
[36] Initial NDCs do not extend beyond 2030, whereas infrastructure projects often have a much longer life expectancy.
[37] See, eg, *Mid States Coalition* (n 7).
[38] Zahar (n 5) 227.
[39] See Alexander Zahar, 'The Contested Core of Climate Law' (2018) 8 Climate Law 244; Alexander Zahar, 'Methodological Issues in Climate Law' (2015) 5 Climate Law 25; Alexander Zahar, 'Mediated versus Cumulative Environmental Damage and the International Law Association's Legal Principles on Climate Change' (2014) 4 Climate Law 217.

tools are the most obvious starting point from which to launch effective responses to climate change.

Environmental assessment, one of the most widespread tools for environmental protection, is a case in point. Zahar does not deny that environmental assessment is an effective tool for environmental protection; his concern is confined to its application to climate change. Most of Zahar's argument, however, only shows the sorts of problem that any environmental assessment procedure has when dealing with cumulative environmental issues—problems which have never prevented the application of environmental assessments. Zahar shows that there are difficulties when applying environmental assessment procedures to climate change, but he does not show that these difficulties are insurmountable. Indeed, the elements of state practice noted in the previous section show that these difficulties can be, and indeed have been, addressed.

In the following, I will show that the main conceptual issue raised by Zahar can be addressed in simple and practical ways before highlighting some examples where climate assessment procedures can achieve substantive mitigation outcomes—and, thus, be meaningful.

The Drop-in-the-Ocean Problem

Zahar is mainly concerned with a vexing issue in climate law. Climate change results from the accumulation of GHGs emitted by several generations, all countries, and innumerable projects. No individual project's GHG emissions cause any direct harm to anyone anywhere in the world. Taken in isolation, each project that undergoes a climate assessment is but a drop in the ocean, or, rather, a puff in the air. This raises problems, in particular when a threshold is required to determine which activity has to undergo a climate assessment or, down the line, whether a proposed activity should be approved. Contrary to what Zahar claims, however, this problem is neither unique to climate change nor insuperable.

Many environmental issues occur not as a result of any single action, but because of the incremental effect of multiple actions by numerous actors over a long period of time[40]—and these issues commonly fall within the scope of environmental assessments. EIA procedures apply routinely, for instance, to industrial projects that contribute only incrementally to regional air or water pollution.[41] As Judge Betty B. Fletcher noted, 'The impact of [GHG] emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.'[42]

As there is seldom a determinable 'safe' level of pollution, environmental assessments often rely on a designated threshold. To determine which projects must undergo a climate assessment, for instance, national legislation and guidance documents often establish a somewhat arbitrary threshold—typically somewhere between 1 and 100 kilotons CO_2

[40] See Garrett Hardin, 'The Tragedy of the Commons' (1968) 162 Science 1243.
[41] See generally A John Sinclair, Meinhard Doelle and Peter N Duinker, 'Looking Up, Down, and Sideways: Reconceiving Cumulative Effects Assessment as a Mindset' (2017) 62 Environmental Impact Assessment Review 183; Jill Gunn and Bram F Noble, 'Conceptual and Methodological Challenges to Integrating Sea and Cumulative Effects Assessment' (2011) 31 Environmental Impact Assessment Review 154.
[42] *Center for Biological Diversity* (n 6) [22]. See also *Environmental Defence Society v Taranaki Regional Council*, A184/2002 [2002] NZ Envt C 441 [22].

equivalent per year ($KtCO_2eq/y$),[43] with simplified assessment procedures applicable to projects at the lower end, and more stringent assessment to those at the higher end.[44] Moreover, the determination of whether a project should be approved is a political decision, not a legal one:[45] environmental assessment 'merely prohibits uninformed—rather than unwise—agency action'.[46] Nevertheless, this political decision is increasingly guided by statutory provisions or other documents establishing standards, thus ensuring a more consistent and transparent treatment.

Climate assessment may provide the political decisionmaker with various relevant benchmarks to determine whether a project's GHG emissions are acceptable. For instance, the activity's emissions could be compared with the state's commitments on climate change mitigation (eg, its NDC), or even with informal pledges made by subnational governments,[47] in much the same way as the regional air or water pollution of an industrial project would be assessed on the basis of applicable air and water quality standards. By approaching the 'costs' of the proposed activity at the scale of its 'benefits', these benchmarks transform a 'drop in the ocean' into a 'drop in a thimble' whose significance can more easily be assessed. A single activity will rarely prevent a state or subnational entity from achieving its mitigation target (or its water quality standard), but the benchmark allows the political decisionmaker to make an informed decision in context. Alternatively, US enforcement agencies have defined a 'social cost of carbon'—an economic value attributed to each unit of GHG emissions—to facilitate a consistent comparison of GHG emissions with the economic benefits of the proposed activity.[48] Yet another alternative benchmark by which to assess the GHG emissions of a project is the GHG emissions of other projects of the same kind—or, more generally, industry standards.

None of these—Zahar will say—provides a mathematical function to assess whether the project should be approved; but this is not what environmental assessment procedures are aimed to do. The goal is to inform a policy decision on the project, not to determine it. There is, inevitably, a strong subjective element in such decisions, if only in weighing economic development and environmental protection. That does not make the process ineffective—at least, not always.

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[43] See Neil Craik, 'The Assessment of Environmental Impact' in Emma Lees and Jorge E Viñuales (eds), *The Oxford Handbook of Comparative Environmental Law* (OUP 2019) 876, documenting thresholds of significance ranging from 10 to 100 KTCO2eq/y; and California Environmental Quality Act: Air Quality Guidelines (May 2010), s2(2), defining the threshold of significance for land-use development projects at 1.1 ktCO2eq/y.

[44] See, eg, Institute of Environmental Management and Assessment, 'Climate Change Mitigation & EIA' (2010) <www.iema.net/assets/templates/documents/climate20change20mitigation20and20EIA.pdf> 2; CEQ, 'Final Guidance' (n 13) 11.

[45] With the exception, arguably, of merit reviews in Australia and New Zealand, and the caveat that decisionmakers must make rational decisions. Decisions that are obviously unreasonable can be quashed in judicial review. See, eg,, in English Law, *Associated Provincial Picture Houses Ltd v Wednesbury Corp*, [1948] 1 KB 223, [1947] EWCA Civ 1

[46] *Robertson v Methow Valley Citizens Council* (1990) 490 US 332, 351.

[47] See for instance *Center for Biological Diversity v California Department of Fish and Wildlife*, 62 Cal4th 204, 220-221 (Cal 2015); *Earthlife Africa Johannesburg* (n 9) [90].

[48] Interagency Working Group on Social Cost of Carbon, 'Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866' (2010). See also *High Country Conservation Advocates v US Forest Service*, 52 FSupp3d 1174, 1190 (D Colo 2014).

Concrete Examples Where Climate Assessment Procedures Can Be Effective

Let us go back to Zahar's assertion that climate assessment is 'senseless'. To be clear, my position is not that climate assessment is a panacea (it is not), but only that it can, in some circumstances, help well-intended decisionmakers identify convenient ways to mitigate climate change, or to avoid obstacles that may make it more difficult to mitigate climate change years or decades later. That incremental benefit is, it seems, well worth the trouble of adding a section on climate change mitigation in existing environmental assessment procedures.

Zahar is not presenting a general survey of climate assessment to assess its effectiveness. It would indeed be very difficult to conduct an empirical study capable of drawing general and reliable conclusions on the effectiveness of climate assessment or, indeed, of any environmental assessment procedures. One could certainly find out whether projects in a jurisdiction are being authorized, and, when they are, whether some conditions are imposed, but this would provide only a partial picture of the effectiveness of the assessment procedure. One would need to follow up on the implementation of any conditions and seek to determine whether those conditions had made a real difference, or whether the project proponent would have implemented mitigation measures anyway. And even then, one would not be taking into account the broader deterrence effect of environmental assessment procedures, which could well be the most important effect of assessment procedures: the broad incentive they create for proponents to reduce environmentally harmful design features even before a project is submitted to the environmental agency. Undergoing an environmental assessment is a long and costly procedure and proponents are likely to consider very carefully, in advance, the prospects of their project being approved. An effective assessment framework could result in fewer applications, or in applications for projects that have already been tailored to be broadly compliant with the decisionmaker's typical demands and expectations. Measuring this broad deterrence effect could be extremely difficult. Moreover, for such an empirical study to say something meaningful about environmental or climate assessment in general, and not only about a particular national environmental or climate assessment framework, it would have to be conducted in multiple jurisdictions.

Absent systematic empirical study, all that Zahar and I have is presumptions, speculations, and anecdotes. The presumption should, of course, be that what states do is not senseless—unless it can be proven otherwise—and that what is almost universally recognized as an effective tool to address various environmental concerns may also be an effective tool to mitigate climate change. Against this presumption, Zahar speculates that climate assessment is ineffective because, in one hypothetical example, a series of ill-considered decisions to build or not to build airports at specific locations in Australia and New Zealand could possibly lead to a net increase in GHG emissions.[49] One could speculate in return, without engaging in such flights of fancy, that climate assessment could be effective in simple and common circumstances—say, planning a new town to facilitate public transportation or designing an oil rig to ensure that it does not need to vent or flare gases. There are at least some concrete examples showing that climate assessments can lead decisionmakers (or judges) to reject projects on the ground that the project's 'costs' (including GHG emissions)

[49] Zahar (n 5) 234

exceeded its 'benefits',[50] or that the enhanced scrutiny brought by public participation can cause decisionmakers abruptly to change course.[51]

Nevertheless, it is probably by imposing minor alterations on proposed activities, rather than by blocking projects entirely (with the risk that emissions will be displaced to another similar project), that climate assessment can reduce GHG emissions most effectively. Project proponents have been required, for instance, to 'implement all reasonable and feasible measures to minimize the release of [GHG] emissions from the [project] site',[52] or, more generally, to use the latest available environmentally friendly technology.[53] Even small alterations can sometimes avoid carbon lock-in in the long term, for instance if new road systems are designed to accommodate future development of public transportation networks. Climate assessment may thus open the eyes of decisionmakers to economical steps which, if taken at the initiating stage of a proposed activity, may prevent large amounts of GHG emissions over an extended period of time. There is obviously no guarantee that climate assessment will always reduce emissions, but we are certainly better off with, than without, this procedure.

Conclusion

Environmental assessment procedures have been implemented in many jurisdictions as a tool for climate change mitigation. I have shown that climate assessment is now emerging as a rule of customary international law. Contrary to Zahar's speculations in next chapter, I have offered concrete examples where climate assessment has proven effective in mitigating climate change. The policy issues that Zahar points to are important, but they are not insuperable; they suggest that legal frameworks on climate assessment are to be carefully designed to maximize the procedure's effectiveness, but not that climate assessment should be thrown overboard.

[50] See, eg, *Earthlife Africa Johannesburg* (n 9); *Gloucester Resources* (n 10).
[51] See, eg,, on the project of the Czech Republic to renovate and expand the lifespan of a coal-fired power plant in Prunéřov: Andrew Burke, 'Federated States of Micronesia v Czech Republic: Greenhouse Emissions as Transboundary Pollution' (2011) 14 APJEL 203, 210.
[52] Planning Assessment Commission of New South Wales, Development Consent under Section 89E of the Environmental Planning and Assessment Act 1979 for project Planning Assessment Commission of New South Wales, Application Development Consent, No SSD-6764 (Wilpinjong Extension Project) (2017), condition 19(b).
[53] See generally Takafumi Ohsawa and Peter Duinker, 'Climate-Change Mitigation in Canadian Environmental Impact Assessments' (2014) 32 *Impact Assessment & Project Appraisal* 222.